THE DIRECTOR OF
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NOTE FOR: C/NIC

FROM : NIO/GPF

SUBJECT : Quantification of NIE Judgments

Attached (Tab A) is a copy of the Kent article I cited at yesterday's morning staff meeting. The charts on pages 55 and 59 came for a time to represent general guidance for drafters and negotiators of estimates. My impression is that the "poets" have returned to the ascendancy in the estimates business in more recent years, leaving their "mathematician" colleagues in the shade.

However, you might note in the second attachment (Tab B)--an extract of DIA's Long Range Defense Intelligence Projections for Planning--that quantification remains a popular art.

Edward B. Atkeson

Attachments:
Tab A - Words of Estimative Probability (Kent Article)

25X1
25X1

From Studies in Intelligence
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The case for consistent, unambiguous usage of a few key odds expressions.

WORDS OF ESTIMATIVE PROBABILITY

Sherman Kent

The briefing officer was reporting a photo reconnaissance mission.[1] Pointing to the map, he made three statements:

1. "And at this location there is a new airfield. [He could have located it to the second on a larger map.] Its longest runway is 10,000 feet."
2. "It is almost certainly a military airfield."
3. "The terrain is such that the Blanks could easily lengthen the runways, otherwise improve the facilities, and incorporate this field into their system of strategic staging bases. It is *possible* that they will." Or, more daringly, "It would be logical for them to do this and *sooner or later they probably will.*"

The above are typical of three kinds of statements which populate the literature of all substantive intelligence. The first is as close as one can come to a statement of indisputable fact. It describes something knowable and known with a high degree of certainty. The reconnaissance aircraft's position was known with precision and its camera reproduced almost exactly what was there.

Estimative Uncertainty

The second is a judgment or estimate. It describes something which is knowable in terms of the human understanding but not precisely known by the man who is talking about it. There is strong evidence to sustain his judgment: the only aircraft on the field are military aircraft, many are parked in revetted hard-stands, the support area has all the characteristics of similar known military installations, and so on. Convincing as it is, this evidence is circumstantial. It cannot justify a flat assertion that this is a military airfield. It makes the case, say, 90 percent of the way. And some sort of verbal qualifier

[1] This particular briefing officer was *not* the photo-interpreter. See page 61 for the special language of P/Is.

is necessary to show that the case is a 90-percenter, not a 100. This is why the briefer said "*almost* certainly."

The third statement is another judgment or estimate, this one made almost without any evidence direct or indirect. It may be an estimate of something that no man alive can know, for the Blanks may not yet have made up their minds whether to lengthen the runways and build up the base. Still the logic of the situation as it appears to the briefer permits him to launch himself into the area of the literally unknowable and make this estimate. He can use *possible* to indicate that runway extension is neither certain nor impossible, or he can be bolder and use *probably* to designate more precisely a degree of likelihood, a lower one than he had attached to his estimate regarding the character of the airfield.

Generally speaking, the most important passages of the literature of substantive intelligence contain far more statements of the estimative types two and three than of the factual type one. This is the case because many of the things you most wish to know about the other man are the secrets of state he guards most jealously. To the extent his security measures work, to that extent your knowledge must be imperfect and your statements accordingly qualified by designators of your uncertainty. Simple prudence requires the qualifier in any type-three statement to show a decent reticence before the unknowable.

Concern over these qualifiers is most characteristic of that part of the intelligence production business known as estimates. This is no small recondite compartment; it extends to almost every corner of all intelligence research work, from the short appraisals or comments of a reports officer to the full-dress research study of the political or economic analyst. Practically all substantive intelligence people constantly make estimates. The remarks that follow are generally addressed to all these people and their readers, but most especially are they addressed to that particular institution of the estimating business known as the National Intelligence Estimate and its audience.

The NIE, taking into account the high echelon of its initiators, producers, and consumers, should be the community's best effort to deal with the relevant evidence imaginatively and judiciously. It should set forth the community's findings in such a way as to make clear to the reader what is certain knowledge and what is reasoned judgment, and within this large realm of judgment what varying degrees of certitude lie behind each key statement. Ideally, once the commu-

nity has made up its mind in this matter, it should be able to choose a word or a phrase which quite accurately describes the degree of its certainty; and ideally, exactly this message should get through to the reader.

It should not come as a surprise that the fact is far from the ideal, that considerable difficulty attends both the fitting of a phrase to the estimators' meaning and the extracting of that meaning by the consumer. Indeed, from the vantage point of almost fourteen years of experience, the difficulties seem practically insurmountable. The why and wherefore of this particular area of semantics is the subject of this essay.

Let me begin with a bit of history.[2]

Early Brush with Ambiguity

In March 1951 appeared NIE 29–51, "Probability of an Invasion of Yugoslavia in 1951." The following was its key judgment, made in the final paragraph of the Conclusions: "Although it is impossible to determine which course the Kremlin is likely to adopt, we believe that the extent of Satellite military and propaganda preparations indicates that an attack on Yugoslavia in 1951 *should be considered a serious possibility.*" (Emphasis added.) Clearly this statement is either of type two, a knowable thing of which our knowledge was very imperfect, or of type three, a thing literally unknowable for the reason that the Soviets themselves had not yet reached a binding decision. Whichever it was, our duty was to look hard at the situation, decide how likely or unlikely an attack might be, and having reached that decision, draft some language that would convey to the reader our exact judgment.

The process of producing NIEs then was almost identical to what it is today. This means that a draft had been prepared in the Office of National Estimates on the basis of written contributions from the IAC[3] agencies, that a score or so of Soviet, Satellite, and Yugoslav experts from the intelligence community labored over it, and that an all but final text presided over by the Board of National Estimates had gone to the Intelligence Advisory Committee. There the IAC

[2] Harry H. Ransom's *Central Intelligence and National Security* (Cambridge, Mass., 1958) carries on pp. 196–7 a bob-tailed and somewhat garbled version of it.

[3] Intelligence Advisory Committee, USIB's predecessor.

members, with the DCI in the chair, gave it its final review, revision, and approval.

As is quite obvious from the sentence quoted above, Soviet and Satellite intentions with respect to Yugoslavia were a matter of grave concern in the high policy echelons of our government. The State Department's Policy Planning Staff was probably the most important group seized of the problem. Its chairman and members read NIE 29-51 with the sort of concentration intelligence producers can only hope their product will command.

A few days after the estimate appeared, I was in informal conversation with the Policy Planning Staff's chairman. We spoke of Yugoslavia and the estimate. Suddenly he said, "By the way, what did you people mean by the expression 'serious possibility'? What kind of odds did you have in mind?" I told him that my personal estimate was on the dark side, namely that the odds were around 65 to 35 in favor of an attack. He was somewhat jolted by this; he and his colleagues had read "serious possibility" to mean odds very considerably lower. Understandably troubled by this want of communication, I began asking my own colleagues on the Board of National Estimates what odds they had had in mind when they agreed to that wording. It was another jolt to find that each Board member had had somewhat different odds in mind and the low man was thinking of about 20 to 80, the high of 80 to 20. The rest ranged in between.

Of my colleagues on the Board at least one—maybe more—shared my concern. My most obvious co-worrier was Max Foster.[4] He and I were shaken perhaps more by the realization that Board members who had worked over the estimate had failed to communicate with each other than by the Board's failure to communicate with its audience. This NIE was, after all, the twenty-ninth that had appeared since General Smith had established the Office of National Estimates. Had Board members been seeming to agree on five month's worth of estimative judgments with no real agreement at all? Was this the case with all others who participated—ONE staffers and IAC representatives, and even IAC members themselves? Were the NIEs dotted with "serious possibilities" and other expressions that meant very dif-

[4] Maxwell E. Foster, one of the original eight members of the Board of National Estimates, a lawyer by trade, and a gifted semanticist by avocation. Some will remember him for his elegant and precise writing; none will forget his eccentricities. He was the man who always wore his hat in the house.

ferent things to both producers and readers? What were we really trying to say when we wrote a sentence such as this?

What we were trying to do was just what my Policy Planning friend had assumed, namely to quote odds on this or that being the case or taking place in the future. There is a language for odds; in fact there are two—the precise mathematical language of the actuary or the race track bookie and a less precise though useful verbal equivalent. We did not use the numbers, however, and it appeared that we were misusing the words.

The No-Odds Possible

Our gross error in the Yugoslav estimate, and perhaps in its predecessors, lay in our not having fully understood this particular part of our task. As Foster and I saw it the substantive stuff we had been dealing with had about it certain elements of dead certainty: Stalin was in charge in the USSR, for example. These, if relevant, we stated affirmatively or used impliedly as fact. There were also elements of sheer impossibility (Yugoslavia was not going to crack off along its borders and disappear physically from the face of the earth); these we did not bother to state at all. In between these matters of certainty and impossibility lay the large area of the *possible*. With respect to the elements herein we could perceive some that were more likely to happen than not, some less likely. These were the elements upon which we could make an estimate, choosing some word or phrase to convey our judgment that the odds were such and such for or against something coming to pass.

At the race track one might say:

> There are ten horses in the starting gate. It is *possible* that any one of them will win—even the one with three legs.
>
> But the *odds* (or chances) *against* the three-legger are overwhelming.

Here, as in estimating Yugoslav developments, there is evidence to justify the citing of odds. But in the world that intelligence estimates try hardest to penetrate—a world of closed covenants secretly arrived at, of national business conducted behind walls of all but impenetrable security, of skillfully planned deceptions, and so on—such evidence is by no means invariably at hand. In a multitude of the most important circumstances—situations you are duty bound to consider and report on—about all you can say is that such and such

is *neither certain to happen nor is its happening an impossibility.* The short and proper way out is to say that its happening is *possible* and stop there without any expression of odds. If you reserve the use of "possible" for this special purpose—to signal something of high importance whose chances of being or happening you cannot estimate with greater precision—hopefully you will alert your reader to some necessary contingency planning. (You may not if you have dulled him by citing a lot of "possibles" of little real consequence.)

If our gross error lay in not perceiving the correctness—or at any rate the utility of the above formulation, our particular error lay in using the word "possibility" with the modifier "serious." Foster and I felt that it was going to be difficult enough for the estimators to communicate a sense of odds even if they stuck to a fairly rigorous vocabulary; it was going to be impossible if the vocabulary were permitted to become as sloppily imprecise as in normal speech. We had to have a way of differentiating between those possible things about which we could make a statement of likelihood and the other possible things about which we could not. The first cardinal rule to emerge was thus, "The word 'possible' (and its cognates [5]) must not be modified." The urge to drop into ordinary usage and write "just possible," "barely possible," "a distinct [or good] possibility," and so on must be suppressed. The whole concept of "possibility" as here developed must stand naked of verbal modifiers.[6]

[5] See page 59.

[6] This usage is wholly in accord with the findings of the lexicographers, who almost invariably assign it the number one position. Further, it is readily understood and generally employed by statisticians, scientists, and the like, who sometimes define it as "non-zero probability." This is much to my taste.

At the same time there can be no question of the existence of a second usage, especially in the ordinary spoken word. The meaning here is most emphatically not the broad range of "non-zero probability," but a variable low order of probability, say anywhere below 40 or 30 or 20 percent. Thus it would fall last in a series that named descending odds: certain, probable, possible. When people use it to signify very low odds, for example below 5 percent, they may say "remotely possible" or any of its many cognates. This of course is not to my liking, but the intended meaning is clear. The serious trouble comes when another group of users lifts the word out of its position in the cellar of odds and by the addition of augmenting adjectives makes it do duty upstairs: "serious possibility," "great possibility," "highly possible."

An Odds Table

Once Foster and I had decided upon this first cardinal rule we turned to the elements where likelihood *could* be estimated. We began to think in terms of a chart which would show the mathematical odds equivalent to words and phrases of probability. Our starter was a pretty complicated affair. We approached its construction from the wrong end. Namely, we began with 11 words or phrases which seemed to convey a feeling of 11 different orders of probability and then attached numerical odds to them. At once we perceived our folly. In the first place, given the inexactness of the intelligence data we were working with, the distinctions we made between one set of odds and its fellows above and below were unjustifiably sharp. And second, even if in rare cases you could arrive at such exact mathematical odds, the verbal equivalent could not possibly convey that exactness. The laudable precision would be lost on the reader.

So we tried again, this time with only five gradations, and beginning with the numerical odds. The chart which emerged can be set down in its classical simplicity thus:

100% Certainty			
The General Area of Possibility	93%,	give or take about 6%	Almost certain
	75%,	give or take about 12%	Probable
	50%,	give or take about 10%	Chances about even
	30%,	give or take about 10%	Probably not
	7%,	give or take about 5%	Almost certainly not
0% Impossibility			

Important note to consumers: You should be quite clear that when we say "such and such is unlikely" we mean that the chances of its NOT happening are in our judgment about three to one. Another, and to you critically important, way of saying the same thing is that the chances of its HAPPENING are about one in four. Thus if we were to write, "It is unlikely that Castro will attempt to shoot down a U-2 between now and November 1965," we mean there is in our view around a 25-percent chance that he will do just that. If the estimate were to read, "It is almost certain Castro will not . . ," we would mean there was still an appreciable chance, say five percent or less, that he would attempt the shoot-down.

We had some charts run up and had some discussions in the community. There were those who thought the concept and the chart a very fine thing. A retired intelligence professional thought well enough of it to put it into a book.[7] CIA officers, addressing War College audiences and the like, would sometimes flash a slide and talk about it. A few copies got pasted on the walls of estimates offices in the community. Some people were sufficiently taken that they advocated putting it on the inside back cover of every NIE as a sort of sure-fire handy glossary.

There were also those who did not think about the idea at all, and others in opposition to it. Some fairly important people who had a professional stake in this kind of thinking never took the trouble to learn what it was all about. A good many did take a little trouble and laughed. Still a third group found out all they needed to know and attacked the whole proposition from a hard semantic base point. Of these more later.

In the face of this inertia and opposition and with the early departure of my only solid ally, Max Foster, I began backing away from bold forward positions. I did continue harassing actions and in the course of making a nuisance of myself to associates and colleagues did pick up some useful converts, but I dropped all thought of getting an agreed air-tight vocabulary of estimative expressions, let alone reproducing the chart in the rear of every NIE. With the passage of time it has appeared that the guerrilla strategy thrust upon me by circumstance was the only one holding any chance of success. In almost fourteen years this article is my first serious and systematic attempt to get the message across, and it probably would not have been written if David Wark[8] had not consulted me about his foray into the same semantic problem.

The Aesthetic Opposition

What slowed me up in the first instance was the firm and reasoned resistance of some of my colleagues. Quite figuratively I am going

[7] Washington Platt, *Strategic Intelligence Production* (N.Y., 1957). The chart appears on the inside cover and again on page 208 not exactly as above but in full accord with my principles. The trouble comes on pp. 209–210, where General Platt departs widely, and to me regrettably, from my notion of legitimate synonyms.

[8] See the next following article.

to call them the "poets"—as opposed to the "mathematicians"—in my circle of associates, and if the term conveys a modicum of disapprobation on my part, that is what I want it to do. Their attitude toward the problem of communication seems to be fundamentally defeatist. They appear to believe the most a writer can achieve when working in a speculative area of human affairs is communication in only the broadest general sense. If he gets the wrong message across or no message at all—well, that is life.

Perhaps I overstate the poets' defeatism. In any case at least one of them feels quite strongly that my brief for the "mathematicians" is pretty much nonsense. He has said that my likening my side to the mathematician's is a phoney; that I am in fact one with the sociologists who try by artificial definitions to give language a bogus precision. He has gone on to stress the function of rhetoric and its importance. And he has been at some pains to point out how handy it would be to use expressions like "*just* possible," "may *well*," and "*doubtless*" as they are loosely used in conversation. Could there not be an occasional relaxation of the rule?

Suppose one wrote a sentence: "Khrushchev may *well* have had in the back of his mind such and such, or indeed it is *distinctly* possible that somebody had just primed him. . . ." Now suppose you delete the "well" and the "distinctly"; has anything been lost? There will be those who point out that "may *well*" and "*distinctly* possible" do convey a flavor which is missing without them. Of course the flavor in question is the flavor of odds, communicated without quoting them. The poets would probably argue that in a sentence of this sort the introduction of any of the terms for particular odds would make the writer look silly. Everybody knows that you could not have the evidence to sustain the use of, say, "probably" in these two instances. Hence you can only suggest odds by the use of the "may *well*" and "*distinctly* possible" and so say something without saying it, in short fudge it. The poets feel wounded when urged to delete the whole ambiguous sentence, arguing that this serves only to impoverish the product. They grow impatient when you advocate dropping only the "well" and the "distinctly." And as for your accusation of fudging, they generally counterattack, inviting you to write something that fudges nothing.

There is a point which the poets can make with telling effect. It is that there are probably just as many reading poets as there are writing poets, and these are going to be numb to the intended meaning of the "mathematician" writer. If you write to give no more than just the general idea or general feel you may get through with great success. Per contra, if you break your heart in an endeavor to make yourself fully and precisely understood, you may not.

I realize the truth in the above; I am not reconciled; I deplore it.

The Growth of Variants

Even if there had been no poets it would have been an impractical idea to print a chart on the inside of the back page of each NIE as a sort of glossary. To have used the one on page 55 and stuck to these words exclusively would have imposed intolerable restraints upon the prose. Even if it had been desirable it would have been impossible to enforce such rigidity. But this was really never at issue: from the start a number of perfectly legitimate synonyms for the concept of possibility and a number for each of the five orders of likelihood were generally recognized.[9]

[9] Some of these synonymous meanings are expressed in verb forms. Thus it is syntactically possible to use them closely coupled to one of the adverbial expressions of odds, e.g., "we believe it likely that . . ." or "we estimate it is almost certain that such and such will not . . ." If we really mean to assign an odds value to these verb forms good usage would forbid this kind of doubling-up. Mathematically, the probabilities would have to undergo a quite ridiculous multiplication. Thus "we believe" (75±percent) multiplied by "likely" (75± percent) would yield odds worse than 3 to 2 instead of 3 to 1. If we are not assigning an odds value to "we believe" and "we estimate," the purist would say we should not use them. Yet on many occasions a writer will feel uncomfortable—and justifiably so—with a bare "It is likely that . . ." Such a bald statement is seemingly more confident than the situation would warrant. The writer will feel something akin to a compulsion towards modesty and a drive to soften the "likely" by introducing it with a "we believe" or "we estimate." Almost invariably he does not intend to change the odds associated with "likely." If one could set himself up as the arbiter, one would, I believe, rule that the "likely," or the "probably," or the "almost certainly," etc. was the operative expression of odds and that its message was unaffected by the introducing verb.

Doubling up in the "possibly" category is a different matter. We should avoid "it might (or may) be possible for the Blanks to . . ." The verb should be present or future indicative, normally "is" and "will be."

For example:

Possible [10]	conceivable could [11] may might perhaps [12]
Almost certain	virtually certain all but certain highly probable highly likely odds [or chances] overwhelming
Probable	likely we believe we estimate
50–50	chances about even chances a little better [or less] than even
Probably not [13]	improbable unlikely we believe that . . . not we estimate that . . . not we doubt, doubtful

[10] These synonyms must not be modified; might *well*, could *well*, *just* could, *barely* conceivable, etc. are as inadmissible as the original sin.

[11] "Could" is included here because of many years' duty as a synonym for "possible." It has also served as a short way of noting a capability as in "The Soviets could develop [for "have the capability to develop"] such and such a radar though we have no evidence that they are doing so." The two usages are close, to be sure, but not identical.

[12] As in, "It is almost certain that such and such will occur in the delta, *perhaps* in Saigon itself."

[13] This group of words poses at least one very vexing problem. Suppose you wish to make a positive estimate that there is, say, about a 30-percent chance that such and such thing is the case. Assuming that the thing in question is important, a 30-percent chance of its being the case is highly significant. If you stick with the chart and write "it is improbable [or unlikely etc.] that such and such is the case" you will probably convey a much more negative attitude than you intend. There are many ways around the problem; they will, however, require a few more words.

Almost certainly not	almost impossible virtually impossible some slight chance highly doubtful

If the chart were expanded to take care of these, it probably would not fit on the inside back cover of the NIE, and even if it could be made to, its complexity would probably exasperate gentle reader more than it would edify him. Still worse, he would be confused by changes that would have to be made in it from time to time, always to accommodate newcomers among the accepted expressions.

The table of synonyms above did not come into being all at once; it has grown to its present size by accretion. "We believe" came in rather early, and as I remember via General Smith himself. "We estimate" was a bit later; "we think," "we expect," and "we judge" are part way in.[14] If they make it all the way I trust they will be used and understood in the "probably"/"we believe" bracket. "We doubt" has been accepted within the last few years as a legitimate equivalent of "probably not." There will be others—I sincerely hope not very many. Keeping them out will take some doing. In the past, whatever the rigor insisted upon at the working and drafting level, who was there to tell a General Smith or a Mr. Dulles, as he presided over the IAC or USIB, that the revision he had just written out on a piece of yellow paper was not permissible?

Consistency in Usage

From my remarks about the poets, it should be clear that my sympathies lie with their mathematical opponents. But we mathematically-inclined are ourselves not in good array. You might almost say that some of us are talking in the decimal, others in the binary, and still others in the root five or seven systems.

For example, consider the letter-number device which has been standard with attaché and other reporting services, A–2, C–3, F–6, etc. The numbers 1, 2, 3, 4, 5, and 6 designating the quality of a report's content stand for, respectively: (1) confirmed by other independent or reliable sources; (2) probably true; (3) *possibly true;* (4) doubtful; (5) probably false; and (6) cannot be judged. Note that the

[14] "We anticipate," used regrettably as a synonym for "we expect," is also part way in. I hope it gets out.

number 3, "possibly true," is in the middle of the scale of odds, doing the duty I have hoped it should never be asked to do.

Or consider the findings of a distinguished intelligence research project. The object was to identify certain military units with respect to the chances of their existence or non-existence. One group of units was called "firm," another "highly probable," a third "probable," and a fourth general group "possible." Except for one important thing, this kind of ordering was wholly to my taste. The word "firm" was unfortunately not used, as one might expect, to describe a condition of 100 percent certainty. Its begetters, upon cross-examination, owned that it was meant to indicate something like 90–95 percent—roughly the equivalent of my "almost certain." This usage puts the lower categories slightly askew from the terminology of my chart—"highly probable" equating to my "probable" and "probable" to my "chances better than even." "Possible," however, was used exactly as I have felt it should be used, to designate something in the range of chances between the absolute barriers of "certainty" and "impossibility" to which no numerical odds could be assigned.

There are other heresies among the mathematicians, if they can be so proclaimed. For example, look at the way in which photo-interpreters have defined their key evaluative words:

> *Suspect*—Evidence is insufficient to permit designation of a function with any degree of certainty, but photography or other information provides some indications of what the function may be.
>
> *Possible*—Evidence indicates that the designated function is reasonable and more likely than other functions considered.
>
> *Probable*—Evidence for the designated function is strong and other functions appear quite doubtful.

This kind of formulation shows that someone—probably a number of people—had spent a good amount of time striving for a set of rigorous definitions. If you pause long enough to realize that the photo-interpreter's first problem is identification and then take a hard look at his word "suspect," you will see that it parallels my usage for "possible." But the P/Is have preempted "possible" for other duty. Their "possible" fits nicely into the slot of "probable" in my scale of values, and their "probable" into my "almost certain."

We are in disarray.

To Estimate or Not

The green language of ordinary conversation abounds with estimates given lightly and with a high order of confidence: "You're a shoo-in,"

"Not a Chinaman's chance," "A million to one." When you hear one of these expressions or read its more decorous counterpart you may realize that the matter at issue and the related judgment required little soul-searching on the part of the estimator. In the intelligence business, too, there are many occasions when the obscurities of the unknown are easily pierced and we can launch an estimative "probably" or an "almost certainly not" with speed and conviction.

There are, however, estimates at the other end of the spectrum—estimates which are patently impossible to make. The green language is equally rich in coping with these: "Search me," "I wouldn't have the foggiest," "Your guess is as good as mine," and so on.

It is unfortunate that intelligence estimators are not allowed this kind of freedom in brushing off requests for estimates of the totally impenetrable. Some way or another a convention has been established by which we may not write the sentence: "It is impossible to estimate such and such." If we try this maneuver our masters will often rudely ask, "Why can't you; what are you paid for, anyway?" If they do not bludgeon us thus, they employ a combination of blackmail and flattery before which even the most righteous among us are likely to fall. The play goes like this: "You say you cannot estimate the number, type, and performance characteristics of Chinese Communist long-range missiles for mid-1970. This is data which is absolutely essential for my planning. Obviously no one expects you to be wholly accurate or very confident of your findings. But you people are after all the experts, and it would be too bad if I had to go to others for this stuff who know far less about it than you. And that is exactly what I will do if you refuse my request."

At this point we do not invite our would-be consumer to seek out his own crystal ball team. We accept his charge, but with grave reservations. Sometimes we try to stay honest by introducing contingencies. "This will probably continue to be the case but only if . . . , if . . . , and if. . . ." Then without closing out the contingencies with firm estimates (which we are plainly unable to make) we merely talk about the "ifs," hoping that he will keep them in mind as time unfolds and that when sufficient returns are in he will himself make the estimate or ask us to have a second look.

At other times again, when it is the whole subject rather than one of its parts that cannot be estimated, we meet the impossible frontally. We scrupulously avoid the word "estimate" in describing the document and its findings. Rather, we proclaim these to be intelligence assumptions for planning. In our opening paragraphs we are likely

to be quite specific as to where our evidence begins and ends, how we are speculating about quantities of things that the other man may produce without knowing whether he has yet made the decision to produce so many as one. We acknowledge our use of the crutch of U.S. analogy, and so on. We promise to speak, not in discrete figures, but in ranges of figures and ranges of our uncertainty regarding them.

Some years back we were obliged by *force majeur* to compose some tables setting forth how the Blanks might divide up an all-but-undreamed-of stockpile of fissionable material among an as-yet-unborn family of weapons. There were of course the appropriate passages of verbal warning, and then, on the chance that the numerical tables should become physically separated from the warning, the tables were overprinted in red, "This table is based on assumptions stated in. . . . Moreover, it should not be used for any purpose whatever without inclusion, *in full,* of the cautionary material in. . . ." More recently we have issued a document which not only began with a fulsome *caveat* but was set off by a format and color of paper that were new departures.

The Lurking Weasel

Unhappily, making the easy estimate is not the commonplace of our trade; making the impossible one is happily equally rare. What is the commonplace is the difficult but not impossible estimate. And how we, along with all humanity, hate the task! How fertile the human mind in devising ways of delaying if not avoiding the moment of decision! How rich the spoken language in its vocabulary of issue-ducking! "I have a sneaker that . . . ," "I'd drop dead of surprise if . . ."—expressions with sound but upon reflection almost without meaning. How much conviction, for example, do you have to have before you become possessed of a sneaker; how much of the unexpected does it take to cause your heart to fail?

Even the well-disciplined intelligence brotherhood similarly quails before the difficult but not impossible estimate and all too often resorts to an expression of avoidance drawn from a more elegant lexicon. What we consciously or subconsciously seek is an expression which conveys a definite meaning but at the same time either absolves us completely of the responsibility or makes the estimate at enough removes from ourselves as not to implicate us. The "serious [or distinct] possibility" clan of expressions is a case in point.

Look at our use of "apparently" and "seemingly" and the verbal "appears" and "seems." We, the writers, are not the unique beings to whom such and such "appears" or "seems" to be the case; with these words we have become everybody or nobody at all. So also with "suggests" and "indicates." Perhaps the "to us" is implicit, but we do not so state; and far more importantly, we practically never say why our suggestibilities were aroused or assess the weight of the reason that aroused them. So still again with "presumably," "ostensibly," and—most serious of all—"reportedly" otherwise unmodified. The latter taken literally and by itself carries no evaluative weight whatsoever, and who should know this better than we ourselves who each day handle scores of "reports" whose credibility runs up and down the scale between almost certain truth and almost certain nonsense. It is a pleasure to report—authoritatively—that you will find very few unmodified "reportedlys" in the NIEs.

We say "the Soviets probably *fear* that such and such action will cause thus and so." What I think we mean is "The Soviets probably estimate that if they do such and such the reaction will be disadvantageous to them." If we say "they probably *hope* . . ." we mean roughly the opposite. We talk of another country's willingness "to risk such and such." This is a shorthand, and probably an unconscious one, for the country's having estimated the odds against the unwanted thing's happening as well as how unacceptable the unwanted thing would be if it occurred. Its "risking the danger" removes the critical judgment a step or two from our personal responsibility.

Words and expressions like these are far too much a part of us and our habits of communication to be banned by fiat. No matter what is said of their imprecisenes or of the timidity of soul that attends their use, they will continue to play an important part in written expression. If use them we must in NIEs, let us try to use them sparingly and in places where they are least likely to obscure the thrust of our key estimative passages.

Here may I return to the group to which I have especially addressed the foregoing—the brotherhood of the NIE. Let us meet these key estimates head on. Let us isolate and seize upon exactly the thing that needs estimating. Let us endeavor to make clear to the reader that the passage in question is of critical importance—the gut estimate, as we call it among ourselves. Let us talk of it in terms of odds or chances, and when we have made our best judgment let us assign it a word or phrase that is chosen from one of the five rough categories of

likelihood on the chart. Let the judgment be unmistakable and let it be unmistakably ours.

If the matter is important and cannot be assigned an order of likelihood, but is plainly something which is neither certain to come about nor impossible, let us use the word "possible" or one of its stand-ins—and with no modifier.